DOCUMENT RESUME

ED 299 995 IR 052 444

TITLE	IFLA General Conference, 1987. Division of Collections and Services. Interlending and Document Delivery Section. Serial Publications Section. Papers.
INSTITUTION	International Federation of Library Associations, The Hague (Netherlands).
PUB DATE	Aug 87
NOTE	14p.; Papers presented at the International Federation of Library Associations (IFLA) General Conference (53rd, Brighton, England, August 16-21, 1987).
PUB TYPE	Speeches/Conference Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Developed Nations; *Electronic Publishing; Foreign Countries; *Interlibrary Loans; *Library Automation; Library Collections; Library Services; National Libraries; *Serials; *User Needs (Information)
IDENTIFIERS	*Book Preservation; Canada; United Kingdom; United States

ABSTRACT

The five papers compiled here cover topics related to electronic publishing, library collections and services, interlibrary loan, and serials. In "The Impact of Electronic Publishing on Library Collection and Services: An American View," Joseph W. Price considers possible consequences on library collections and services in the United States of developments in electronic publishing. In "The Impact of Electronic Publishing on Library Collection and Services: A British View," Brian J. Perry discusses the same topic from the British perspective. In "Interlending and Conservation: Friends or Foes?", Maurice B. Line argues that local library use can damage books as much or more than interlibrary loan and suggests methods of conservation. In "The Use of Electronic Mail and Interlibrary Loan Automation in Canada," Carrol D. Lunau highlights the experiences of the National Library of Canada, focusing on automation developments and their impact on interlibrary loan operation. In "Bibliographic Access to Serials: A Study for the British Library," Philip Bryant describes a study of British Library users' requirements and understanding of the catalogs when searching for serials. (MES)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED299995

DIVISION OF COLLECTIONS AND SERVICES

Session: 72 Monday 13.00 – 14.15

The impact of electronic publishing on library collection and services: an American view *(38-COLL-1-E)*
Joseph W Price
Library of Congress
Washington DC USA

The impact of electronic publishing on library collection and services: a British view *(109-COLL-2-E)*
Brian J Perry
British Library
London UK

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
A.L. Van Wesemael
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SECTION ON INTERLENDING AND DOCUMENT DELIVERY

Sessions: : 94 Tuesday 10.30 – 12.00
151 Wednesday 10.30 – 12.00

Interlending and conservation: friends or foes? *(24-INTL-1-E)*
Maurice B Line
British Library
Boston Spa UK

The use of electronic mail and inter-library loan automation in Canada *(25-INTL-2-E)*
Carrol D Lunau
National Library
Ottawa Canada

SECTION ON SERIAL PUBLICATIONS

Session: 118 Tuesday 15.00 – 16.30

Bibliographic access to serials: a study for the British Library *(10-SER-1-E)*
Philip Bryant
Centre for Catalogue Research
University of Bath UK

IR052444

Data conversion by Saztec Europe as a contribution to IFLA 1987

BEST COPY AVAILABLE

The Impact of Electronic Publishing on Library Collection and Services: An American View

Joseph W. Price, *Chief, Science and Technology Division, The Library of Congress, Washington, DC USA*

ABSTRACT

Electronic publishing, a concept ranging from alphanumeric text processed by computers to complex audio-visual interactive artificial intelligence systems, poses many challenges to the collections and services of libraries. At first, electronic forms were parallel to conventional publications. Now electronic only publications are appearing. In all likelihood, lower manufacturing costs and more streamlined processes available through electronic publishing will add to the already overwhelming number of publications which libraries must consider. Risk identification, analysis, and strategy formulation are essential for librarians seeking to harness and make available the benefits of these new publication forms.

The use of electronic means in publishing has existed for decades. In fact, some of the earliest applications of automation in general were in the printing and newspaper industries, much to the regret of trade unionists. However, efforts to date have still been predominantly concentrated on a final product of print on paper.

Now, however, publications are emerging in parallel or near parallel print and electronic forms, and only forms to be printed selectively on demand are also appearing.[1] What are the impacts of these developments on library collections and services? This short paper attempts to describe some likely consequences, at least as seen in the United States. No attempt was made to exhaustively survey the scene in the U.S., so the suggestion that this is an"American" view must not be taken too seriously.

What is electronic publishing? Viewed narrowly, electronic publishing might be thought of only in terms of alphanumeric characters which are captured, processed, stored and conveyed to a reader in some way which requires the use of machines for interpretation. This view is so narrow as to be deceptively simplistic, yet some self-named futuristic evangelists carry this simple concept to ridiculous extremes and predict the demise of such antiquated, passe, non-relevant institutions as libraries. These pundits are apt to declare that before the end of this century the entire Library of Congress will be available in chip form to be worn and consulted as a part of your wristwatch. If you believe this, then I would like to interest you in purchasing some real estate in New York which spans the East River from Brooklyn to Manhattan. This and other extreme views of the future would, if true, have an obvious impact – there wouldn't be any more libraries.

Electronic publishing, however, is much more than alphanumeric text stored in vastly compact form in physically tiny electronic or optical memories. Viewed broadly, electronic publishing is of great consequence and could change the way libraries and librarians do their jobs. As institutions serving societal as well as informational needs, however, the pace of change in libraries is likely to be much slower than that of electronic publishers where the introduction of new developments appears to continue to accelerate.

For this paper, electronic publishing is broadly defined to include software for audio, visual, and data processing machines, data bases, interactive games and tools, on-line access, in addition to (would you believe conventional?) alphanumeric text. Why so expansive a definition? Because all of these forms are being "published" and distributed to lesser and greater extents and thus may need to be dealt with by libraries. Indeed, the challenge is to seek out these forms, to assess their potential for serving clients, and to craft creative strategies for acquiring them and using them.

A tour through the collections received as copyright deposits at the Library of Congress reveals an incredible diversity of electronic publishing. Unlike other libraries in North America who would have to seek out these publications, the Library of Congress receives them practically automatically and has to contend with their diversity and complexity. For us, it's not simply a matter of ignoring or discarding them. If submitted for copyright registration, an effort must be made to examine them and properly register them. This can creat incredible problems because of the complexity, intricacy, and lack of standardization. Once, when giving a briefing to senior Library of Congress management illustrating the diversity of these copyright deposits, a copyright employee demonstrated a musical watch. When she turned it on to play the tune, she couldn't get it to stop and the only way to prevent the disruption of the briefing was to bury the watch in her purse. Although it would be stretching a point to consider a musical watch to be an electronic publication, this anecdote does demonstrate the challenge of dealing with collection materials, which use machines and come with or without extensive documentation.

What is forced on the library of Congress, however, can be selected and controlled by other libraries. Starting with collection development policies, librarians can choose what to acquire, how to process it, and how to make it available. Even when one can select, however, they still must contend with shortages of funds, talent, and, of course, the risk of investing great sums and energies into technologies not long supported or rendered obsolete. The machines required to review and use electronic forms are often costly and require regular maintenance. It is difficult to acquire trained staff to set up, operate and maintain equipment and yet to not do so, leaves the library vulnerable to dependence on original suppliers or service bureaus who could go out of business in the event of economic or other difficulties. The risk of obsolescence is more than a question of standardization since often the purpose of new product innovation is contrary to standardization. Manufacturers of new products, especially products from others, i.e. "to stand out from the crowd." This marketing strategy can and does fail, however, and libraries which acquire the "latest" technology based on persuasive advertising claims can find themselves with scores of collections which cannot be used after the reading machines no longer exist.

Setting aside these dire cautions, what are the positive impacts of electronic publishing on library collections and services? First, libraries can provide services and allow clients to enrich themselves intellectually in ways heretofore impossible. Secondly, they can often provide these new services without major additional costs beyond the initial capitalization. Third, they can acquire or access vast numbers of electronic publications without requiring additional storage space, and indeed eventually discard space consuming original publications in favor of randomly and remotely accessible electronic forms (which, in some cases, may provide a clearer, more readable form through, for example, digital image and aural enhancement). Last, but not least, electronic forms may provide the only viable means of preserving indefinitely the content of physical publications when it is either impossible or too costly to preserve the original artifact, or as in the case of rare and fragile materials, when it is too risky to allow use of the originals.

In a thoughtful copyrighted article, authors Brownrigg, Lynch and Engle review classical technical service functions as impacted by electronic publishing.[2] For example, circulation defined as inventory control ceases to be a concern when any patron can obtain a copy from electronic source. Serials check-in, another inventory function, is not necessary in an all electronic publishing environment. Cataloging can be enriched to include tables of contents and the like obtained directly from electronic source. Collection development, acquisitions, ordering could become easier if guided by shareable automated publishers' records showing what has been ordered and how often. There is a risk, of course, of loss of confidentiality if the ordering preferences of individuals rather than institutions are shown. And, of course, there is a risk that statistically based choices might result in collections built according to the lowest common denominator of popular tastes. This undesirable outcome can be foreseen now in the U.S., where so many discount book chains are driving out quality and specialty book stores. However, on the positive side, the costs to publishers of accepting and making available publications of narrower interest should be less in an all electronic environment, thereby giving more authors an opportunity to be noticed and read. On this point this author disagrees with Brownrigg, Lynch and Engle, who state that electronic publishing could reduce the rate of growth of available information since it will become easier to recognize useless publications which "languish unacquired in the publishers' computers or receive little use after the library acquires it."[3] On the contrary, electronic publishing could result in a greater accumulation of worthless words as the costs of preparing, storing, and delivering of text decrease in an all electronic publishing environment.

A useful illustration of the impact of electronic publication is the experience of the Library of Congress in its Optical Disk Pilot Program. Although the products created in this project are not available for sale as publications, their impacts on services are similar. Among the specialized collections of the Library is our collections of prints and photographs and related items which number in excess of twelve million. A number of these items are too rare and fragile to be handled by anyone other than a few qualified staff, not to mention library patrons. In effect, they are not available. Other items of less rarity can be examined but require staff intervention to retrieve them and

BEST COPY AVAILABLE

present them to users. Many times this is not a trivial process, especially when the item desired is a large poster of several square feet in dimension. In any case, each time these items are handled by staff and patrons there is the risk of damage and undoubtedly an incremental accumulation of ordinary "wear and tear". As a trial, the Library and a contractor photographed several collections of tens of thousands of items, produced laser videodiscs, and made them available for public use. Further, the Library cataloged the items and placed the records on a micro- computer system linked to the videodisc player. Now a patron can search, using Boolean logic combinations, against this data base and randomly retrieve video images of items from the collections. The patron can also "browse" through the images on the videodisc (they are contiguously arranged in "lots" on the disc) and they can retrieve the cataloging record associated with any image with the press of one key on the microcomputer keyboard. Additionally, the patroncan print out a copy of the video image on a video printer connected to the system. From a managerial vantage, since the system is simple and easy to use, it is no longer necessary to require staff to retrieve items of interest to patrons when they are on the videodisc. Since this is just a pilot system and only a tiny portion of the collections are on the disc, there are no quantifiable staff savings. However, it is not difficult to imagine this type of service on a very large scale which would also allow additional savings from remote and less costly storage of the original artifacts. In this case, the originals have intrinsic value and would unlikely be discarded in favor of an analog video image. Also, there is still a necessity for returning to the original for special purposes of scholarly examination and in order to make publication quality reproductions. As digital facsimile technology improves, however, it would seem possible that for certain classes of items, just as with the printed page, facsimiles would suffice for all purposes. This is the strategy being considered in the other part of the Library's Optical Disk Pilot Program, where it is hoped that digitized facsimiles would be part of the answer to the preservation problem and to the need for containing the increasing accumulation of the printed word without the necessity for additional library buildings. Time does not permit a fuller treatment of the Library's disk program in this presentation and conferees are referred to the literature for more details.

What are other libraries doing about electronic publications? There are several initiatives under way in North America and, as mentioned before, this paper does not pretend to be a survey. Nonetheless, a few developments are described here. Of interest are library activities related to creating electronic forms and those involved in using or testing of new electronic publishing products.

In addition to the Optical Disk Pilot Program, the Library of Congress is anticipating both the production and use of compact disk read only memories (CD-ROMs). Early products are likely to be the MARC Distribution Service, the Antarctic/Cold Regions Bibliography, and a CD-ROM product based on and in celebration of the bicentennial of the United States Constitution. We have also begun to sell compact audio disks based on our collections and on concerts held at the Library. Additionally, the Library is considering establishing a specialized reading room on a trial basis which would feature public use of CD- ROM publications and possibly on-line access to other electronic data bases.

University Microfilms, International of Ann Arbor, Michigan, created an electronic publishing product which they have been testing in a few libraries in the U.S. This product consists of digital facsimiles of the 1984 issues of 42 Institute of Electrical and Electronics Engineers (IEEE) journals. The system allows the searching of indexes, the display of facsimiles on a micro- computer screen, and the subsequent printing of high quality facsimiles on a laser printer. In this way it is conceptually similar to the ADONIS biomedical journal article publishing venture. Other full text (not facsimile) on-line electronic publishing systems include the Lexis and Nexis systems. Both the American Institute of Physics and the American Chemical Society have experimented with on-line access to their journals.

In the United States, there is a depository library program in which all federally generated publications are supposed to be deposited. In recent times, however, more and more federally generated information is never "published" in the usual sense and exists only in electronic form. The author serves on a special task force created by the U.S. Congress to examine this problem. At the end of its deliberations, this task force recommended the establishment of pilot programs to test modalities of distribution of federally created data bases to depository libraries and to study the impact and consequences on the collections and services of the participating libraries. These pilots await funding but if performed, should provide a rich resource of information on these issues.

In describing a rosy future for electronic publishing, it is tempting to minimize the problems and difficulties. Certainly there will be risks to libraries. Risks are not new problems. Certainly there are major issues such as who will pay for the often higher direct costs of accessing electronic publications. Certainly there are preservation concerns and long range archival worries about who will take responsibility for the continuity of creation and provision of access to electronic publications which lose commercial profitability.

Certainly there are risks of obsolescence, loss of technical support and other frightening risks. However, the challenge to librarians is to be courageous and to avoid being overwhelmed by the complexities, costs, and risks, but in spite of these to devise innovative, creative, and effective ways of using these new technologies to enhance research, to remove barriers of access to information, and to contribute to preserving the content of our collections for generations to come.

1. A very recent electronic only journal is *Flora On-Line* (ISSN 0892-9106) offered by the Buffalo Museum of Science with issue no. 1 dated January 12, 1987.
2. Edwin Brownrigg, Clifford Lynch and Mary Engle, "Technical Services in the Age of Electronic Publishing," *Library Resources and Technical Services* 28:59-67 (Jan./Mar. 1984).
3. Ibid., p.65.

109-COLL-2-E

The Impact of Electronic Publishing on Library Collection and Services: A British View

Brian J PERRY, *Director, Research and Development Department, The British Library, London, UK*

ABSTRACT

Electronic publishing provides a spectrum of challenges and opportunities to Libraries and Information Services. On the one hand there is the potential for providing reader services more closely directed to the real needs of users, on the other hand there are competing providers outside the normal pattern of information provision and there is great uncertainty about pricing and charging policies. Libraries are also faced with new problems about their position in archiving the record. A concerted effort is needed to produce guidelines on how to meet these challenges in an orderly and coordinated fashion.

It is worth starting with the realisation that, apart from the term itself, the concept of electronic publishing is *not* new. It dates from the time that the first book, journal or secondary service was put into machine-readable form. There are many different definitions of what exactly electronic publishing (see, for instance, (1) & (2)) but the significance for library and information services and collections is that information is *available* in electronic form and, potentially at any rate, this electronic form may be used to provide services to users.

This potential presents many problems to libraries. Indexes and abstracts in machine-readable form, for instance, can usually be searched much more efficintly and rapidly than the printed version, providing greater user satisfaction. Unfortunately, such searches will also usually, produce a request for many more references of original material than do the 'traditional' manual searches. The use of on-line searching also generally appears much more expensive per search (sometimes by a factor of 10) than searching the printed bibliography, (though the comparative methods used to cost-out these searches are often suspect). Because major abstracting and indexing services are progressively becoming more and more expensive in their printed forms and because users are becoming more familiar with on-line searching, several libraries have cut down on their purchases of the printed version, thus making them even more dependent upon the electronic form. In so doing, they have removed the facility for the "quick & dirty" search that is still very much a part of scholarly enquiry. Perhaps even more importantly, too great a dependence on the on-line version can cut down on serendipitous finding of material, since "irrelevant" contigous items are no longer brought together by "happy chance".

The introduction of on-line services has brought another serious challenge to librarians – the fact that information services are often sold directly to the final users, the scientists, lawyers, doctors, historians etc. With some information providers this is a deliberate policy – if they serve the end user directly they can gain a greater

appreciation of his needs and can provide services that are more immediately responsive. In other cases, the provision of services to users direct is almost an historical accident – especially with scientists who were already into computing, the direct take-up of machine-readable data-bases and information services was seen as a natural occurrence. However the fashion of direct provision began, there is little doubt that it is accelerating. It is very noticeable, in both the USA and the UK, amongst the legal, medical and financial communities and direct services to these and other professionals are growing rapidly.

What does this mean to librarians? First, money that could be going into their budgets is being spent elsewhere – frequently within departmental funds. Second, they are possibly losing their customers, they are certainly losing the chances of being intermediaries to their users and, with the librarians information-handling skills, of providing searches that are perhaps more efficient and financially more effective. Thirdly, they are losing the opportunity of proving their professional validity in the increasingly "information-conscious" age.

This increasing problem of direct interaction between the end-user and the information provider is not one that is easily tackled by the librarian. In all institutions there is a need for the library staff to prove themselves as efficient information handlers whose knowledge and skills can be put to effective and efficient use in handling the information problems of their users. There is a need for the library staff to keep up to date, even more than they do now, with the latest developments in information sources and information-processing techniques. Lastly, there is a need for the library staff to be able to sell themselves and their services in a proactive manner – far too many libraries still maintain a reactive stance and pride themselves on being able to produce the goods if, and only if, they are asked for.

I realise that this is asking quite a lot of libraries at a time when almost all countries are suffering virtual, if not real, cuts in the provision of library services. However, without an overall change in attitudes, I honestly think that libraries may as well go back gracefully to the honorable concept of "curators of the books". What we need, if libraries are to meet new challenges, is a profession that deliberately seeks to recruit a large proportion of staff that are outgoing and adaptable, that ensures efficient education of new entrants to the profession, that equally ensures efficient continuing educational facilities and that makes certain that professional conferences, workshops, seminars and publications contain material relevant to the development of both library staff and services. At present, far too many of our gatherings and publications give the outside observer the appearance of dullness and irrelevance. Both need to be sharpened to higher professional standards and to serve a more dynamic purpose.

If we are to change, then we must spend money and your very valid question is "where is it to come from?". Much of it, I would suggest, could come from existing budgets for education, training and conference attendance – we just need to be more demanding about what we buy. Other money could come from a greater knowledge of what exactly is spent on information of all types within the institutions that are served by libraries. If the librarians can show how thy can spend this money more efficiently then they can surely make out a case for transfer to their own budgets.

In beginning with the problem of on-line services, I have only really touched the tip of the iceberg that is composed of the problems associated with electronic publishing. It is a relatively simple problem to be faced with a service that is published in parallel format, ie. in traditional printed form and in similar but electronic form. However, almost from the beginning of electronic publishing, the electronic form has differed to some extent from its printed alternative. MEDLARS, for instance, very soon had more index terms for the average entry than did "INDEX MEDICUS". The trend for this to happen has been increasing and, indeed, for electronic-only versions to appear, with no paper back-up. As from 1984, the British Library has kept its eye on what has been happening within the United Kingdom, as part of its programme on producing criteria for archiving electronic publishing – a programme to which I shall return later. Two surveys have been published (3) and (4)) and in the most recent (4), the author surveyed the British producers of 79 databases. Of these, 13 had no printed form and a further 9 indicated that the electronic form exhibited some difference from the printed form. Perhaps just as interesting was the fact that a further 25 of the databases were "almost the same" as the printed form – there is surely a potential here for the two versions to drift apart!

Not just databases are published only in electronic form – the first electronic book "The Blind Pharoah" was published in the USA in 1982 and it had been claimed that the first popular electronic journal "Aladdin" was published earlier this year on floppy discs. Unless there is a great change in the distribution of microcomputers and associated equipment, it is not likely that there will be a tremendous growth in the publication of electronic-only monographs and popular journals but there is a distinct possibility that the scholarly community, already dissatisfied with the delays caused by traditional refereeing and printing, could turn to the production of their own electronic journals. After all, many of them are now well used to the facilities afforded by electronic mail and bulletin boards and, in some cases, have relegated their "Newsletters" to the electronic medium. The concept of the "electronic journal" has been discussed since the mid-1970's and from 1981 to 1985 my Department funded the BLEND (Birmingham and Loughborough Experimental Network Development) project which included an experimental electronic journal called "Computer Human Factors". On the basis of this and work carried out in other sites, last year we set up Project Quartet. This research programme is based on four academic sites in the United Kingdom and aims to solve most of the problems of the production and distribution of electronic data, in whatsoever form it is produced or disseminated. It is therefore concerned with the handling of alphanumerical and graphical data and its effective generation and use. I should, perhaps, add that the project is actively being monitored with a view to effective interaction with traditional publishing practices.

Over the past few years, we have seen the availability of encyclopaedias in electronic form – notably the Academic American Encyclopaedia and the Encyclopaedia Britannica. Publication of reference works in this manner is bound to increase as people see the value of the electronic version and it is interesting to note that earlier this year Microsoft made available the "CD Bookshelf" which on a single disc, only 120mm in diameter, has 10 major reference works available, together with the software needed to use them effectively.

The "CD-Bookshelf" its itself a good example of how new technology is affecting electronic publishing. This is especially true of the various optical storage meida that have become available over the past six years and which have the potential for changing radically methods of distribution of databases and other forms of publication.

I have very briefly surveyed electronic publishing and indicated some of the impacts that it has on libraries and their services. Unfortunately, there are many more that I would like briefly to cover.

First, there is a problem of choice. Especially with the predicted effect of optical disc publishing, librarians will be able to choose between the printed version, the on-line version and the stand-alone, machine-readable version, or any combination of all three. Obviously, their decisions must be based on predicted use of these facilities within their organisation. Pricing policies may affect their decision greatly – for the electronic version these are bound to be different from those for the published version and there is a tendency amongst information suppliers to charge for the *use* of information as opposed to a once and for all charge as with printed publications.

Librarians will need to have the equipment available to read the electronic versions. In spite of valiant attempts to standardise on eg the CD-ROM we are already faced with a bewildering array of equipment and systems' and librarians need to ensure that their opinions are heard at an early stage in development. It is for this reason that the R & D Department considers it very necessary to get involved in new technologies at an early stage, so that their potential for the library world can be assessed and to allow the library world an early voice in development.

I have already mentioned the need for education and training – especially in the use of new technology. Experience has shown that it is not easy too for either practising librarians or library school lecturers to keep up to date and, after a series of trial runs, the R & D Department decided to introduce new publications to help. We are publishing "Information Technology Fact Sheets" that cover each of the relevant new technologies and a regular "Newsletter" that up-dates on various developments in the IT world. We have also instituted a regular series of seminars on Information Technology and Research – mainly for British Library staff, but also for external researchers.

Electronic media in their various forms produce problems for librarians as to how they are going to be archived. For all forms of non-print material there is a varied approach to problems of archiving. In many cases, this does not matter too much in that many copies are produced and are stored in different types of libraries. However, with fully electronic publishing in the centralised mode we are presented with the possibility that copies are held in only one place and are uniquely at the disposal of the information owner or publisher.

Associated with problems of archiving and also deposit regulations, are the problems of copyright and control. Publications which are distributed electronically are very amenable to copying, and libraries and publishers will need to consider providing solutions to access that are satisfactory to both sides. Deposit could be confused by certain developments, especially in journal publishing, where experiments

are underway with the interactive article that may be changed by electonic discussion and the interpolation of new results – what then forms the definitive final edition?

The problem of archiving electronic material has long been on the agenda of the BNB Research Fund, which is an independent fund administered by the R & D Department. In 1984 it hosted a conference on the archival aspects of electronic publishing (5) which produced many recommendations that demonstrated the problems faced by librarians. This was followed up by several studies – including one on selection criteria for archiving electronic publishing (6).

Electronic publishing could also produce problems of biliographical control – especially where individual articles are published on-demand by systems such as ADONIS and we need now, even more urgently than before, an effective world-wide system for identifying individual articles with ease.

The last, but not least, problem I would like to identify is that of conservation. Electronic publishing will produce many alternatives to paper and microfilm for long-term storage but there is no certainty that these media have long life expectancies. In 1983, the BNB Research Fund contracted for a state-of-the-art survey in this area (7) and this has recently been partly updated (8). However recent rumours of "laser-rot" in entertainment video discs mean that the field has to be more carefully examined.

Once again, the library profession is faced with a mixture of new challenges and opportunities for enriching its collections and services. The problems are great and require careful research and consultation before they can be answered. In the UK, we have gone someway to researching into these problems, but we have a fair way to go yet. We will willingly share our experiences with our colleagues world-wide in an effort to speed the process.

References

1. Brian J Perry "Different Tyres of Electronic Publishing" *LIBER Bulletin* (23), 1985, p54-58.
2. Gordon A Somerfield "Electronic Publishing from the Publisher's Viewpoint" *LIBER Bulletin*, (23), 1985, p 59-65.
3. S Hills "Electronically Published Material and the Archival Library" *Electronic Publishing Review*, 5(1) 1983, p63-79.
4. Monica Blake "Aspects of Electronic Publishing" *Electronic Publishing Review 6* (3) 1986 p151-167.
5. "Archival Aspects of Electonic Publication and their Availability: Report on a 1-day Seminar". BNBRF Secretariat, 1984.
6. Paul Sturgess "Policies and Criteria for the Archiving of Electronic Publishing". *Journal of Librarianship*, 1987 (in press).
7. Tony Hendley, "The Archival Storage Potential of Microfilm, Magnetic Media and Optical Data Discs"; National Reprographic Centre for documentation; 1983; NRCd Publication No. 19. (BNB Research Fund Report No. 10).
8. Tony Hendley, "CD-ROM and Optical Publishing Systems"; Cimtech; 1987; Cimtech Publication 26 (BNB Research Fund Report No, 25).

24-INTL-1-E

INTERLENDING AND CONSERVATION: FRIENDS OR FOES?

Maurice B. LINE, *Director, IFLA International Programme for UAP, British Library (Science, Technology and Industry), Document Supply Centre, Boston Spa, UK*

ABSTRACT

Conservation is of no benefit unless the items conserved are used in the future, but it should not prevent use. Local library use, whether consultation, lending or photocopying, can damage books as much as if not more than interlibrary use; and some types of material are rarely or never wanted on interlibrary loan. A conservation programme should include the retention of items for future availability, which is desirable for adequate interlibrary availability. The preservation of the contents of books by microfilming or digitization aids both conservation and interlending. The selection of items for conservation of the original or the making of surrogates presents difficult problems. When items are photocopied or lent, there are various ways of reducing wear and tear. Conservation of non-book materials raises fewer problems, because the format is rarely important or valuable. When books are filmed or digitized, conservation has to be applied to the films or digitized text.

I start with one of Ranganathan's Five laws of library science: *Books are for use.* They are however for use not only by present users, but by users yet to come: and if they are to be available for use in the future they need to be both kept and looked after. Herein lies the problem: how is one to serve users of the present without endangering services to users of the future, or, conversely, how can one ensure future use without restricting present use?

Ranganathan's law is however worth restating. Some libraries talk about books as if they were objects of value in themselves quite apart from human beings. They are of course of value only in relation to human beings, and conservation for its own sake is meaningless. Even when the form is of more value than the content, it is so only because human beings value it more. Conservation for its own sake could be achieved by putting entire collections into a cold meat store and leaving them there; they would remain in excellent condition for so long as no-one wanted to use them. I would like to state here Line's Two Laws of Conservation: *Conservation is for future use* and *Conservation should not prevent use.* It would be utterly wrong to ban any user from access to a book on the grounds that some other user may want it in the future. Such banning could become an infinite process: a user may come along in the future only to be told that the book he wants is being protected for future users, and so *ad infinitum.* My Second Law of Conservation could be reworded as a Law of Library Use: *Present users must not be sacrificed to future users.*

If we accept this, as surely must, we have next, in the context of the theme of this paper, to ask what is so special about interlending and interlibrary photocopying. How exactly does it endanger books more than local consultation, local photocopying and local lending? Let us look first at lending of item. Obviously with interlending damage may occur in transit, whether items travel by mail or by some othermeans. This danger can be minimized by good packing. Otherwise there is almost certainly less danger to a book lent remotely than to a book lent locally. The likelihood of loss through theft is much less, largely because there is a double record of the issue and both libraries tend to behave more responsibly towards books obtained from elsewhere. This responsibility extends to the way books are handled by readers, who often seem so much to appreciate the fact that the trouble has been taken to obtain items from elsewhere that they do not use them as instruments for pressing flowers or supports for pianos or uneven floors. The danger of damage through bad handling can be further reduced by restricting use to the premises of the borrowing library, but this should not normally be necessary.

It could be argued that items borrowed from elsewhere are likely to be more uncommon than items held in a local library, and therefore that they should not be exposed to risk. Leaving aside for the moment the unique or really valuable item, there is little evidence, in the UK at least, that there is anything uncommon about the vast majority of items wanted on interloan. Half of the requests fall on books published in the last four or five years.

If we turn to photocopying, much more care is likely to be taken by library staff in copying items to meet remote requests than by readers copying library materials for their own use.

Finally, consultation in a library has its dangers – such as theft or the neat removal of several pages. (Incidentally, do restrictions on local lending tend to encourage these malpractices?)

I conclude that interlibrary lending poses very little if any more danger to books than local lending or reference use, and that interlibrary photocopying poses less. If restrictions are to be placed on interlibrary access on the grounds that it is inimical to conservation, they should be placed equally on access within libraries. In any case, since books are for use, there is no reason why a remote user who wants a book should not have equal access to it as if he were a local user. Line's First Law of Interlending states that *Remote users have equal rights to access with local users.* (There may be conflict between local and remote uses, but that is another issue: I would only say here that it should be a conflict on equal terms, not one biased heavily towards local use).

Another point needs to be borne in mind when considering interlending vs. local library use. many library materials are rarely or never wanted on interloan at all, whether because, like many kinds of ephemera, they cannot easily be identified as individual items, and therefore cannot be requested from a remote location, or because they need a great deal of cross-reference across volumes, like law reports, or because they are wanted for regular or frequent reference, like most encyclopedias, and therefore require consultation on the spot. Nor are we talking about medieval (or any other) manuscripts or works form Gutenberg's press or Shakespeare folios, which no scholar would want or expect to obtain on interlibrary loan.

One possible conflict between conservation and interlending is that they may be seen as competing for resources. If they were there is no doubt where my preference would lie: users must be served, or librarianship is meaningless. However, any self-respecting interlending system should be self-financing – that is, it should be designed so that supplying libraries recover the costs incurred. Money is still of course spent because in such a system the requesting library has to pay, and this means that it has less to spend on other things, including conservation. The main competition for funds for conservation is likely to be acquisitions, and the choice between acquiring new material converving existing stock may be a major and difficult one. It should be remembered that the less spent on acquisitions, the greater the need for access to the resource allocation, but any conflict between conservation and interlending should be a very small one.

I have, I hope, established that any conflict that exists is not between conversation and interlending but between conversation and use; and since conservation is for future use the only real conflict is between present and future use, both of which need to be catered for. That said, for some reason interlibrary supply is seen as more of a threat than local use; and by trying to find solutions that reconcile interlending and conservation we should be able to reconcile use and conservation also. I would make here a new point: that conservation is usually interpreted as keeping originals in good condition, or possibly converting them to microform or digital form. I would like to see included in it *the retention of items for future availability*. It seems rather absurd to spend massive effort and money on conserving older books that happen to be in research libraries already while letting unique copies of fairly recent books disappear from libraries together. This is like preserving particular trees while letting whole species disappear. It is easy to see how this can happen: many books are bought by public libraries, where they are so popular that they become worn out, or they become out of date or out of fashion – in either case they are discarded. Academic libraries are much more relunctant to discard, but they not buy many of the most vulnerable books; and even they discard material from time to time. Ten years after a book's publication, there may well be a one in ten chance, or higher, that there is no loanable copy (I exclude legal deposit copies in the National Library) in the country of its publication. Such books, while their content may be less 'valuable' then that of more 'academic' works, are just as much part of the national culture and heritage, and although interlibrary demand for them may be relatively small it does exist: witness our failure in Britain to find loanable copies of some British books for which requests are received. In any case, many of these books would be regarded as 'valuable' if they happened to be 200 years old – and may indeed be so regarded in 200 years' time, especially if most of them are allowed to disappear.

The equation that people tend to make between age and value, not only in the case of books but for almost everything from castles to coins, is an odd one. It seems that there is a natural progression from new to recent to old-fashioned, and then to antique. A motor car made in 1970 is generally valueless; a motor car made in 1910 is priceless. This is understandable when the object or artefact contains useful historical evidence, but to prefer *all* old objects over *all* new objects just because they are old is absurd. Yet it is beliefs of this kind that must lie behind the eagerness to conserve older books while letting many new ones rot or disappear.

Retention for future availability is an important element in UAP. There are various possible solutions to this problem; I wish for the present only to point out that the need exists, that provision for it should be seen as part of a total conservation programme, and that national library resources for conservation should be allocated with this in mind – even if, as is probable, it would mean that there was less money available for treatment of some individual items. From the viewpoint of availability and use, retention of 'last copies' for future availability has been sadly neglected, and to this extent conventional conservatiton programmes do not benefit availability as much as they might.

Conservation of individual items can involve treatment of the items themselves, conversion to microform or digital form (surrogation) or both. The first is or can be very expensive, and does nothing either to increase or to reduce access by users unless the original is in such a bad state that it cannot be handled at all; even after treatment it may be regarded as so precious or vulnerable that use should still be reduced to a minimum, so that there is still a conflict between conservation and use (or, as I prefer, between present and future use). The second process, surrogation, which is usually cheaper and sometimes much cheaper, makes it possible to keep the original in better conditions and also to restrict use of it to an absolute minimum without unduly penalizing users. Untreated, the original may eventually rot away, but if the contents are preserved it may even be decided to destroy the originals after conversion, on the grounds that the cost and difficulty of treating them are too great, as the case of many newspapers. The only reservation I would enter here on behalf of the user is that microform is uncomfortable and sometimes positively distressing to read for extended periods; good microform readers are therefore vital, as are adequate facilities for making prints from microform. The third option makes the best of both worlds conservation-wise but the worst economically; the original is conserved and its use can also be restricted, while use of the text can be unrestricted.

The second and third options both solve the problem of preserving the text permanently *and* greatly aid availability, since either hard copies can be made (copyright permitting) from the surrogates (microform or digital form) and lent or sold to requesting libraries, or the surrogates themselves can be lent – or, perhaps, the digital text can be transmitted electronically and printed out at the receiving end. Here conservation and interlending (or wide availability) are close allies: the same procedure benefits both.

There is in fact a fourth option that might be added to the three above: production of a facsimile reprint, whether this is a straightforward offset-litho reprint or a superfine facsimile (eg of a fine piece of Renaissance printing). This is conservation only in the sense that it enables the original to be better preserved, but it aids availability even more than the production of a surrogate version, since copies of the reprint can be bought widely and lent (one would hope) freely.

One possible conflict that can arise is in the selection of material for conservation, whether by treatment or surrogation, and in what is done with it once selected. The 'custodian' will tend to select first the most rare or valuable items and give them thorough treatment; the 'exploiter' will wish to make sure that items most in use are kept in a usable condition, which need not involve very expensive treatment – if it does, he will usually prefer to convert them to another form, or perhaps suggest to a publisher that they be reprinted. In practice, a compromise tends to be reached in a conservation programme: 'treasures' are certainly prime candidates for conservation, but so are more recent and much less valuable items that are in demand. The greatest uncertainty is over the large area between these extremes, of material that may receive or expect some use and that is considered to be of some value either in its original form or in its contents. Should selection be made mainly on grounds of potential use or of perceived value? As I said above, this ought not be a real dilemma, since value must ultimately be in the mind of the user, but I can imagine a difficulty in choosing between, say, a first edition of Kafka that may never actually be consulted because the text is readily availalle otherwise, and the third edition of a book by Freud which is now out of print and still in demand. Ideally perhaps one would conserve the Kafka in its original form and produce a surrogate of the Freud – but suppose there is not enough money for both, especially if by choosing the Freud you can do at least 2 or 3 other volumes for the same price as the Kafka? Librarians will choose differently according to their predilections.

A great deal more work and thought need to go into the optimal allocation of conservation resources, balancing a number of different factors. Perhaps some concept or measure could be introduced similar to that being proposed for the allocation of medical resources. A measure called a 'qualy', or 'quality adjusted life year', has been developed by Professor Alan Williams of the University of York Department of Health Economics. This tries to take into account not only how much longer persons will live if they receive a certain treatment but what their condition will be. For the same sum of money you might, for example, be able to add 20 years of semi-vegetable and painful existence to one person's life; or 10 years of good health to 3 people's lives; or 3 years of reasonable health to 10 people's lives. Similarly, there may be a choice between keeping 20 books in usable condition for 100 years, 5 books in good condition for 500, or 1 book for 2000. We may yet see a 'quarbly' (quality adjusted book life year).

An optimal allocation of medical resources might result in a decision that some people should receive euthanasia. This raises big ethical issues, but scarely stronger feelings perhaps than the suggestion that some books might be painlessly put to death so that others can live better and longer. As noted earlier, librarians do not seem to mind books disappearing quietly (just as we accept that some people die from lack of care), but when it comes to deliberate extermination it is a different matter. Here the battle-lines may be rather differently drawn; for I suspect that most conservators would accept bibliothanasia more readily than either custodians or people like me who are concered with maximum availability. Since however many publications are important as representative rather than as individual items, I would resolve this problem by random sampling of such publications, with some chosen for conservation or surrogation and the rest left to decay or summarily executed.

Meanwhile, how can one maximize availability from day to day while

minimizing damage? Photocopying rather than lending eliminates the danger of loss in the mail, but careless copying can also cause damage. This can be minimized by the use of special machines which do not necessitate opening a book wide and putting it face down on a platen. Repeated copying even on such machines can still cause damage, and in such cases it would be better (copyright permitting) to make a surrogate and use that for subsequent copies. This might work in a library where the amount of interlibrary copying was small, but where it was large there would be not only the cost of making surrogates of perhaps quite a large number of items,mainly journal issues, but the logistic problem of managing the copying operation from a collection that was a mixture of printed and surrogate text – mixed in some cases even within the same journal title, since microfilms would not exist (nor could they be made) of current and recent issues.

As for lending, better wrapping would do most to reduce wear and tear on items sent by mail or other means of transport. Inevitably packets and parcels are thrown around, and good protection can now be provided quite cheaply. More fundamentally, library staff have to be warned regularly to handle books with care; this applies to the British Library Document Supply Centre, where staff are conscious of being information providers rather than custodians, they handle items in very large quantities, and there is a constant drive for speed and efficiency. If we are to require, as I am convinced we should, conservators to keep in mind my maxims about conservation being for use, we must equally require 'exploiters' to keep in mind the need to ensure that books remain in a condition that will keep them usable in the future. I would add to my First Law of Library Use a Second Law: *Future users must not be sacrified to present users.*

Wear and tear can also be minimized by trying to ensure *either* that use is where possible shared among a number of copies and that these are locatable; *or* that use is concentrated on a dedicated facility like the British Library Document Supply Centre with no archival responsibilities, thus enabling other libraries to restrict remote use – the British Library's reference collections in London are much more easily conserved because nearly all pressure to supply remotely is placed on the Boston Spa collection. This is incidentally one excellent reason why libraries should use such a facility where it exists to the maximum, rather than spreading requests among other libraries; it also of course minimizes the conflict between local use and remote supply of such libraries.

In this paper I have dealt exclusively with printed materials. However, publications in other forms than print also need to be both made available and conserved. The problems are less in the sense that the physical form is rarely of any importance – content is everything. Little is lost and much can be gained by copying on to a more durable medium; indeed, if copying is not done deterioration can be rapid and the contexts may be largely irrecoverable, as in the case of nitrate film. Copying can also be necessary for continued availability, unless libraries and archives are to keep in working order a range of obsolete machinery. Similar considerations apply to surrogates of printed publications: the condition of microforms may have to be watched, while digitized text in certain forms such as CD-ROMs has an unknown life. There is no technical problem in making a new copy of a text that shows signs of deterioration, but there are costs involved, and there is certainly a need for regular examination. Conservation problems do not end once copies have been made.

I conclude that while there is some conflict between use and conservation, this must be reconciled because conservation is meaningless unless it has use in view, while use cannot be guaranteed without some kind of conservation programme; that whatever conflict there is, interlending adds little or nothing to it; and that a well-planned conservation programme can both aid conservation and increase availability. To do so, it should pay more attention to retention of 'last copies' and to microfilming on digitization; both require planning and cooperation, which needs to be international in the case of surrogate. I see IFLA's UAP and PAC programmes working together to achieve the ends of both without harming either – and I believe this is both necessary and achievable.

References

Atkinson, Ross W. Selection for preservation: a materialistic approach. *Library Resources & Technical Services*, 30 (4), October/ December 1986, 341-353.

Capital Planning Information *National repository plans and programmes: a comparative study of existing plans and possible models.* Wetherby: IFLA International Office for UAP, 1982. Summarized in: Kennington, Don and White, Brenda. National repository plans and programmes. *Interlending Review*, (1) January 1982, 3-7.

Childs, Margaret S. Further thoughts on 'Selection for preservation: a materialistic approach'. *Library Resources & Technical Services*, 30 (4), October/December 1986, 354-362.

Govan, J.F. Preservation and resource sharing: conflicting or complementary? *IFLA Journal*, 12 (1), 1986, 20-24. (Urges cooperation in microfilming and digitization programmes).

Line, Maurice B. The availability of old, rare and precious books: problems and solutions *Interlending Review*, 10 (4), October 1982, 119-124.

Lynch, Clifford A & Brownrigg, Edwin B. Conservation, preservation and digitization. *College & Research Libraries*, 47 (4), July 1986, 379-382. (Argues strongly for digitization).

Quinton, Lord. On the problems of ploughing.... *Library Association Record*, 88 (10), October 1986, 487, 489, 492. (This address to the Library Association Annual Conference in 1986 by the Chairman of the British Library Board discusses the need for conservation and the problems of selection).

Seaton, D G. Conservation in high-use collections. *Interlending and Document Supply*, 11(1), January 1983, 7-11.

Wilman, H. Document delivery without damage. *Interlending & Document Supply*, 13 (4), October 1985, 112-115. (Describes 3 mechanisms for copying without damaging the material copied).

Wilson, Alex. For this and future generations: managing the conflict between conservation and use. *Library Review*, 31 (3), Autumn 1982, 163-172.

25-INTL-2-E

THE USE OF ELECTRONIC MAIL AND INTERLIBRARY LOAN AUTOMATION IN CANADA

Carrol D. Lunau, *Senior Advisor (Systems and Analysis), National Library of Canada, Ottawa, Canada*

ABSTRACT

Within the last five years, Canadian libraries have increasingly abandoned Telex for electronic mail when sending interlibrary loan requests. An intelibrary loan protocal has been developed and automated systems using this protocol are now being implemented. The author looks at these developments and describes their impact on interlibrary loan operations. The experiences of the National Library of Canada are highlighted in order to demonstrate how these developments have created a more effective and interlibrary loan system.

Introduction

Interlibrary loan (ILL) is a very prominent, heavily used service in Canadian libraries. Canada is a large, sparsely populated country with two official languages. Jurisdictionally there are ten provinces and two territories. Regional and cultural diversity is encouraged both by the geography of the country and by the political system. This diversity exists in the libraray community as well since education and culture come under provincial rather than federal jurisdiction and there are strong, well developed links between Canadian and American libraries. The use of electronic messaging systems and both formal and informal ILL arrangements are common in this environment.

Canadian libraries began automating in the early 1970's and there are now many different, incompatiblwe library systems being used. There is one Canadian commercial bibliographic utility, Utlas, which is used by a number of libraries in Canada and the U.S.

The two largest net lenders are the National Library of Canada and the Canada Institute for Scientific and Technical Information (CISTI). The National Library lent 41,044 items and CISTI supplied 204,130 items of ILL in 1985/86. Location services are also provided by these libraries with the National Library processing approximately 150,000 requests a year. Amongst the tools used to provide locations is the National Library's automated system, DOBIS, which includes an automated union catalogue containing the holdings of over 300 libraries. This union catalogue is available online and accessed by 350 libraries across the country.

Use of Electronic Mail in Interlibrary Loan

Within the Canadian environment, it is important for libraries to be able to identify who owns an item and to be able to request it quickly on

loan. The four most common modes of communication which are used by libraries to send requests both to the National Library and to one another are telephone, Telex, mail and electronic mail. In 1982/83 Telex was the most commonly used communications device (56% of all requests received by the National Library); however, Telex now accounts for only 2% of requests. Traditionalmail and telephone have remained fairly constant at between 15% and 18%. The big growth, from 6.5% in 1982/83 to 64.5% as of February 1987, has been in the use of electronic mail. Figure one illustrates this rather dramatic change.

Electronic mail allows libraries to communicate with each other much more quickly and makes the ILL process more efficient. However, it became apparent that, in order to process the request when it is received and to automate some aspects of the service, the format of the data should be standardized. This was accomplished by developing an electronic mail script. The script provides a series of prompts which ask the user to enter in a consistent format information about who he is, the type of service required and the bibliographic details for the requested item. A sample of the National Library's script is shown in Figure two.

The most commonly used electronic mail system for ILL in Canada is Telecom Canada's ENVOY 100 but, unfortunately, there are several other systems, often using different equipment, which require the user to learn different commands and which produce different message formats. This problem of incompatible systems and equipment presents a real barrier to easy communications. Technology, fortunately, has presented a solution with the development of the Reference Model for Open System Interconnection (OSI) which presents a basic architecture for computer communications to allow incompatible systems and hardware which adhere to the standard to interconnect and exchange information. The model is recognized by the International Standards Organization (ISO) and the International Telegraph and Telephone Consultative Committee (CCITT).

The Interlibrary Loan Protocol

Using the OSI Reference Model, the National Library of Canada developed the ILL protocol – a standard to facilitate the exchange of ILL messages between libraries that use different commputers, systems and communications services. The protocol specifies the number and type of ILL messages to be exchanged, the data elements and their values and the sequence of the messages.

Work began on the development of the ILL protocol in 1983. After a pilot project and subsequent revisions the ILL protocol has been submitted as a working document to the Canadian Standards Association (CSA), and in the U.S.A. to the National Information Standards Organization (NISO), for consideration as a common North American standard. The protocol is also being considered for standardization by the International Organization for Standardization (ISO).

Interlibrary Loan Automation In Canada

Within ILL departments, online searching and, as previously stated, the use of electronic mail are commonplace. Many libraries have developed microcomputer systems to handle functions such as message creation. CISTI has developed a system which automatically searches incoming requests against their local system, CAN/OLE, and retrieves the call number when a match is found. Utlas has developed an ILL module on their REFCATSS system which handles messaging and will automatically transfer data from the online database to the ILL request. Nonetheless, there are no fully developed automated ILL systems in Canada; however, a number of libraries are beginning to define their requirements and plan for the development of such systems.

The National Library of Canada decided to implement the ILL protocol and consequently had to develop and automated ILL system. This ILL system includes all functions required for location, lending and borrowing activities. The ILL protocol has been incorporated into the system and ENVOY 100 continues to be used as the communications vehicle for transmitting messages.

The main features of the system are that:

- It is available in eithe English or Frency;
- It is easy t use, incorporating a HELP function as well as being either command or menu driven;
- A single workstation can be used to perform all system functions;
- Requests from other protocol users or ENVOY 100 users are automatically added to the database, searched against DOBIS on the basis of DOBIS document number, and the call number and lcoations are copied into the ILL request;
- All messages are automatically sent by the system and the online ILL directory automaticaly identifies the appropriate communication system and address;
- All requests are monitored and tracked by the system;
- Mailing labels are automatically produced by the system based on the information in the directory;
- and
- Library symbols for locations found on OCLC and Utlas are automatically converted to national, standard symbols;

The system was designed and developed by a project team composed of National Library programmers and ILL staff. Implementation was in April 1987. The system was developed on a mainframe because of the number of workstations required, 19 microcomputers and 6 dumb terminals, and because of the number of transactions processed. Other libraries, whose ILL operations are smaller than the National Library's will be able to acquire of develop ILL systems for mini and microcomputers.

Benefits of Protocol Based Interlibrary Loan Automation

In order to realize the maximum benefit from protocol based ILL automation there must be a number of libraries using these systems. Nonetheless, even at this early stage of implementation a number of tangible benefits have occurred from the automation of ILL operations at the National Library.

Because protocol messages are exchanged in a standard sequence there is better control and tracking of a request. Each transaction is considered to be in a particular state and, as various operations are performed, a pre-definedd series of state transitions occurs. By querying the system a requesting library can determine the status of its request. More extensive analysis of interlibrary loan usage patterns is also possible.

The standardization of the data elements on all types of ILL request, combined with the presence of an online ILL directory, allows the local system to interpret and process the request automatically. For example; the system can determine the type of request (i.e., loan or location), search the local database, route the request to different workstations and printers, sort the request and send reply messages. Many of these routine clerical tastks have been eliminated since staff no longer sort requests, maintain manual request files, deliver requests to other locations in the building, look-up and convert library symbols before sending messages or manually compile operational statistics.

The capability of using a single workstation for all functions has resulted in reduced time and expense for training library staff. Staff no longer have to cope with different terminals for different systems. There are no longer clusters of terminals since each staff member has a personal workstation. This has resulted in a more efficient use of space and a more effective workflow.

Messages are created, stored and controlled within the local system. This has resulted in reduced monthly telecommunications charges because ENVOY 100 is no longer being used for message creation and storage. Only the actual transmission of the message is now being handled by ENVOY.

Adherence to the protocol will allow different ILL systems to exchange information in a common machine processible format. It will not be necessary to develop different software to convert data from incompatible systems or to learn different procedures to send and receive messages from multiple systems.

The cumulative benefits from this system have allowed the National Library to provide a more effecive interlibrary loan service while coping with rising demands and a reduction in staff. However, greater benefits would result if, in order to integrate all ILL requests in one database for control purposes, the National Library was not required to input all mail and telephone requests into the system. An active program is underway to encourage the use of electronic mail and the implementation of the ILL protocol nationally.

Conclusion

The ILL protocol has improved ILL operations by allowing more efficient and effective messaging betwen libraries. However, messaging is only one component of the complete ILL operation and the National Library has initiated a study to provide a model for integrating bibliographic applications in an OSI environment. This study will be completed in late 1988 and will detail how the four functions relating to ILL – citation/authentication, location, messaging and electronic document delivery would be integrated.

As well, the National Library is planning to enhance its own system to improve its directory capabilities, to expand the automatic searching capabilities on DOBIS and other online databases, and to investigate the feasibility of fully exploiting the features of the microcomputer workstation. For example; the use of a windowing environment will greatly improve the current workflow since not all incoming requests will need to be printed.

The use of electronic mail, the development of the ILL protocol and the development of protocol based interlibrary loan systems have resulted in a highly developed, effective Canadian interlibrary loan service. Nonetheless, there is still a substantial degree of research and development needed in the area of directories, information search and transfer and electronic document delivery. Another requirement is the wide adoption of X.400 for exchange of messages between communications networks. A great deal of progress has been made in five years but there is still much to be done!

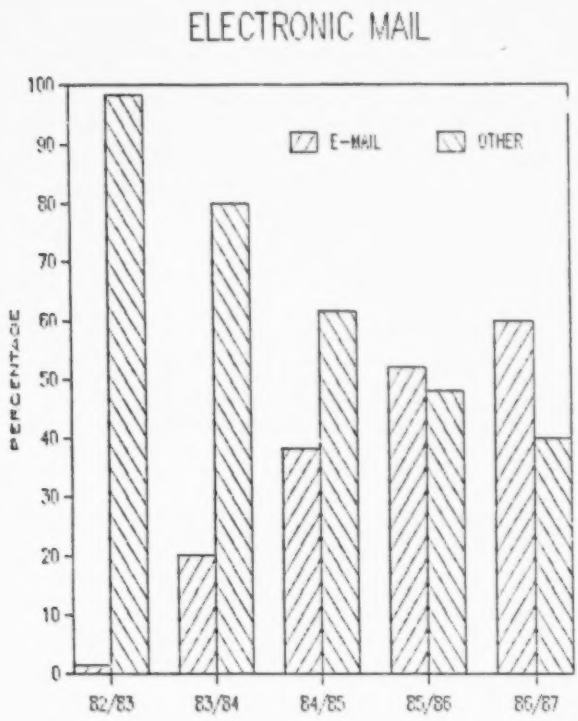

FIGURE 1

```
Command?  COMPOSE OONL
E(nglish) or F(rench)? E
Do you wish to see the Policy Statement as of February 1st, 1986
Y(es) or N(o)?  N
F(ull) or A(bbreviated) prompts for this messaging session?

                        OONL - ILL REQUEST


Request number:
Borrowing library symbol:
Patron name:
Patron status:
Any special delivery instruction (Yes/No)?
Level of service:
Need before date (YYMMDD):
M(onograph) or S(erial)?
OONL call number (leave blank if unavailable):

Author/Editor (include * if main entry):
(End with .CR on a new line)
.
Title (include * if main entry):
(End with .CR on a new line)
.
Place of publication:
Publisher:
Report (series) no.:
(End with .CR on a new line)
.
Edition:
Publication date:
LCCN:
ISBN:
DOBIS document number:
Additional numbers/letters:
Verification source:
(End with .CR on a new line)
.
Notes:
(End with .CR on a new line)
.
```

FIGURE 2

Bibliography

Clement, Hope E. A. Electronic networking for interlibrary loan in the OSI environment. Paper presented at the IFLA General Conference, Chicago, 1985. 19 p. (Xeroxed) (053-IL-2-E)

"Interlibrary loan protocol project update." *Bibliotech: Interlending.* May 1986–3. 7 p. ISSNO825–9658. Text in English and French.

National Library of Canado. *Interlibrary loan (ILL) protocol specification: Draft CSA preliminary standard.* Ottawa: National Library of Canada, Information Technology Services, March 31, 1987. In press.

National Library of Canada. *Interlibrary loan (ILL) service definition: Draft CSA preliminary standard.* Ottawa: National Library of Canada, Information Technology Services, March 31, 1987. In press.

National Library of Canada. *Putting the pieces together: Interlibrary loan service.* Ottawa, 1986. ISBN 0-662-54433-1, 11, 12 p. English and French tête-bêche.

10-SER-1-E

Bibliographic access to serials: a study for the British Library

Philip BRYANT, *Director, Centre for Catalogue Research, University of Bath, Bath, UK*

ABSTRACT

The size, age and wide distribution of the various parts of the British Library have led to varying priorities being given to keeping catalogue records up to date and the catalogues are available in a variety of formats and applications of cataloguing codes. This causes problems for users and frustration for staff, especially when searching for details of serials titles and holdings. In 1986, as part of the British Library Serials Project, the Centre for Catalogue Research at Bath University undertook a study in the British Library Humanities and Social Sciences Main Reading Room and the Official Publications Library. The aim was to find out details of users' requirements and their understanding of the catalogues when searching for serials. This paper describes the background to the study and gives details of some of the results from interviews with 225 users. These interviews also involved ascertaining users' understanding of six sample serials catalogue entries as currently produced by the British Library. The results clearly showed that users experienced far more problems with the layout and punctuation of the entries than with bibliographic content. ISBD punctuation caused some major misunderstandings.

The Centre for Catalogue Research

Before I proceed to the main theme of this paper I feel that I should give you a little background information about the Centre for Catalogue Research. This is to set the British Library Serials project within the context of the rest of our work.

In 1977, following eight years of catalogue research and development work by the University Library at Bath, the British Library R & D Department decided to establish the Bath University Programme of Catalogue Research. The Programme was officially given Centre status by the British Library in 1980, but for all practical purposes the Centre can be considered to have been founded in 1977. As a Centre its remit was to act as the national focal point for bibliographic record research in the UK. 'Centre for Catalogue Research' sounds somewhat old-fashioned these days. In fact the word 'catalogue' within our title covers research into the use of bibliographic records for cataloguing, acquisitions, issue systems, resource sharing schemes, and includes study of the methods of subject processing. The Centre's staff are few in number and, in order to supplement our limited resources, we sometimes sub-contract research projects to appropriate freelance professionals and occasionally employ part-time members of staff.

There are two committees which assist the Centre in its work: the Advisory Committee and the Management Committee. The Advisory Committee consists of persons representing various types of library and special interest groups in the UK. Therefore we have representatives from University, Polytechnic, Public and Special Libraries and from the Library Association's Cataloguing and Indexing Group, the MARC Users' Group, the British Library, and individuals who have been invited to become members in their capacity as experts in the field. The Management Committee is the executive committee for the Centre.

The main areas of the Centre's research can be categorised as follows.

(i) *Content*. What information should be included in bibliographic records? We study the need for data, the ease with which it can be used and the costs involved, both in relation to data input and data output.

(ii) *Source*. How should bibliographic records be acquired and created?

(iii) *Access*. How sould the records be accessed? We have been especially interested in the keyword and free language approach.

These three areas of research are considered in relation to cost effectiveness, the influences of new technology, and – most important of all – the user.

Let me now proceed to describe the study which is the subject of this paper.

The British Library and its serials catalogues problem

Libraries consist of four main features:

Stock

Buildings to house and protect that stock

Staff to look after the stock and the building for users

Bibliographic records created to control the stock

I believe that, for the majority of libraries, I have put these features in their correct order of priority. Obviously *all* are essential for a completely efficient library system, but whilst stock without bibliographic records can at least be considered usable under certain conditions, bibliographic records without stock are useless.

Naturally there is one type of library where bibliographic records are essential and that is a closed access library such as that of the British Library Hamanities and Social Sciences (H&SS). The problems of correctly identifying items for retrieval, which may take anything from an hour to a day to be delivered to readers, are considerable. Wrong retrieval will result in wasted time and the anger and frustration of the reader requesting the item; it may even mean that the user will never be satisfied, or at least not for a very long time. Many users, even though they may have travelled from the other side of the world, can often only visit the British Library for a day or two at the most, and it may be years before they have the next opportunity – if ever! As those of you present at this meeting will know, there is one category of material which probably causes more problems than any other when it comes to precise identification of requested items. That category is serials. Nowhere is this problem more clearly evident than in the British Library.

The British Library suffers, not only from its vast size and lack of properly designed stack space (although the new building should solve this problem for a while), but also from its many different catalogues which have been produced over the years. The result for those using these catalogues when searching for serials titles and holdings statements has been frustrating in the extreme.

The British Library takes approximately 182,000 serials titles. Each year some 9,000 *new* serials titles are added to the collection and over 1,000,000 issues are received. The notional costing for running the British Library's serials service in 1985 was estimated to be £6,700,000. In 1984 a decision was made by the senior management to thoroughly investigate the problems of serials control in the British Library. A study was set up the aim of which was to:

"present and justify a strategy for improving serials control, using automated systems wherever appropriate."

This project evolved from a study on the handling of serials in the then Reference Division undertaken the previous year by Miss Dorothy Walker. The Project Head of the new study was Mr. Ross Bourne. His remit was extended to cover the British Library as a whole. The study was to be concerned with the complete range of routines associated with serials management: selection, acquisition, registration, routeing, claiming, financial control and bibliographic functions i.e. the recording in catalogues, bibliographies and other listings of the library's serials providing both general bibliographic and local (including holdings) information.

The fragmented nature of the British Library means that there are varying priorities given to keeping catalogue records up to date. In addition, although automation is applied almost universally in the library as far as the production of catalogues and other listings are concerned, the catalogues come in a variety of formats and applications of cataloguing codes. This, as I said earlier, greatly complicates matters for the users and also for the staff who have to serve them. To some extent the British Library Serials Study arose from dissatisfaction felt, and often expressed, with the library's catalogues. A survey of reading room usage appeared to indicate that there were users who preferred to visit other libraries rather than attempt to find a periodical entry in GK3 i.e. the main catalogue of the British Library H & SS. A particular problem was the use of the heading *Periodical Publications* followed by the place of publication and reference from this to a direct title entry – let alone from a guard book or printed volume catalogue to one produced in microfiche format. The extent of this dissatisfaction led to the British Library through Mr. Ross Bourne asking the Centre for Catalogue Research to undertake a study last July and August in the H & SS Main Reading Room (or, as most people will still think of it, the British Museum Reading Room) and the Official Publications Library (OPL). Originally it was intended to carry out the study in the Science Reference and Information Service (SRIS) as well, but lack of staff prevented this being tackled at that stage.

In May 1985 I received a letter from Ross Bourne setting out the problems which it was hoped the Centre could study. He pointed out that the serials records were spread over all manner of files – machine-readable, card, book, photocopied list, and so on. There were inconsistencies of bibliographic content and standardisation. The Division wanted to build upon what it had already done (machine-readable records could at least be adapted or reduced in length) but it was felt that *there was a lack of evidence on what sort of serials records catalogue users actually wanted*. It was presumed that it was possible to separate users *bibliographic* needs from their *practical* needs, but the nature of the latter could only be guessed at.

As a result of receiving this letter I asked Ross Bourne for a short paper to submit to the Centre's Advisory Committee for comment and he kindly obliged. The paper stated that "empirical research might be able to resolve the following questions:

(a) what is the extent of information which research library users need in order to find a serial issue in their library's collection?

(b) is that information wholly or partially available from fuller bibliographic records (i.e. to AACR2 standards)?

(c) what is the most helpful way of presenting that information as to order, presentation and format (e.g. keyword, citation in abbreviated form 'World List' order, microform, print, online)?"

The Centre's Advisory Committee supported the idea of this study as the Centre for Catalogue Research had not involved itself in investigating serials cataloguing up to that date. It had, however, carried out an intensive study of the relative merits of full and short entry catalogues for monographic stock.[1] The interest of the proposed British Library project for me lay more in the users use and understanding of the catalogue than in the serials themselves.

The Centre's project

After a number of discussions with senior staff from both H & SS and from SRIS I prepared a short paper setting out the aim, objectives and methods of the proposed study. The following are the salient points from the paper.

Apparently there were two particular problems when attempting to trace details of serials held in the British Library:

(i) Users (including some members of the library's staff) often do not appear to understand the content, arrangement, and presentation of data in the existing catalogues.

(ii) Library staff are unable to search for items in other sections/ departments of the British Library, except by looking through a range of different catalogues compiled in a diversity of ways.

It had been suggested that a union list of serials in the British Library, which used a consistent and possibly simpler form of entry, would save considerable time, effort and annoyance, both for readers and for library staff.

The aim of the Centre's study was:

"To discover the needs of users in respect of bibliographic access (i.e. the amount of bibliographic description required) to the British Library's serials collections and to determine the most effective way in which those needs might be met"

I listed six objectives as follows:

(i) To establish an initial 'suggested subset' of data for serials catalogue records which is acceptable to the majority of British Library readers' services staff.

(ii) To assess British Library users' understanding of, and satisfaction with catalogue entries as currently produced. Do the entries include the information the user expects to find? Are the layout, filing and presentation satisfactory?

(iii) To find out how users formulate their approach to the catalogue, i.e. what information do they bring to the catalogue and from where do they obtain this information?

(iv) To find out the nature of users use of serials in the British Library, e.g. are they interested in the serial for its content, or as an artefact?

(v) To find out why users 'fail' when using the British Library's catalogues and, possibly, to obtain some evidence of the degree to which users are obtaining serials from sources other

than the British Library when the latter should be expected to stock them.

(vi) To monitor those occasions when readers ask for a serial stocked by the British Library, but not held in that section of the Library at which the enquiry is made.

As far as methods of data gathering are concerned, I have always placed a high value on experimental research in preference to market survey type research as the latter can often lead to greatly misleading results. To give users alternative options to search has always seemed to me a much more scientific and satisfactory method of assessing the performance of catalogue entries, sequences and forms of presentation, than merely asking for responses and opinions about possibly hypothetical situations (e.g. "if there was a 'title' catalogue would you use it?") Unfortunately it was not possible to use experimental techniques with the readers using the H & SS Main Reading Room, because it would have taken too much of their time. I also felt that self- completed questionnaires would not be appropriate, as only those who wanted to complete them would do so and, also, there were too many practical problems involved in collecting them. I decided therefore that I would have to rely on interviews for collecting data on objectives (ii) to (iv). I wanted the interview schedule to be a fairly short one as my aim was to obtain a reasonably large number of responses – at least 300 in the H & SS Main Reading Room and OPL. These responses were obtained from a representative sample of users throughout the opening hours of of 20 days during the period 4th July to 7th August 1986. Readers were approached when they were working *in* the Reading Room and not when they were entering or leaving it. I did not want them to be selected for interviewing just at the catalogues, but also when they were at the shelves or walking about. Interviews at desks were only undertaken if there were no neighbouring users who could be disturbed. As it was not possible to use experimental methods it appeared that the next best thing was to show users a small sample of catalogue entries. These entries were selected from those currently produced by the British Library and were for a range of typical categories of serials titles. They were selected by senior members of the British Library's staff. Users were asked to comment on their understanding, or lack of understanding, of the various parts of the entries, including abbreviations and punctuation.

In order to achieve Objective (ii) the establishment of a suggested subset of data elements for serials catalogue records, a set of elements based on those used in *British Union Catalogue of Periodicals: New Periodical Titles* was circulated to public services staff throughout the British Library. It was disappointing that so few replies were in fact received from the staff concerned.

To find out why users 'fail' when using the British Library's catalogues, i.e. Objective (v), reading rooms' enquiry staff were asked to write down brief details of those items for which help was requested because of unsuccessful searches for serials titles in the catalogues. Staff were asked to make careful notes of what caused problems for the users. Because of the amount of work involved this 'logging' took place during one hour randomly selected each day of the 20 days of the study.

In addition the reading rooms' staff kept a 'log' of all those requests made for serials stocked by the British Library, but not held in the section at which the enquiry was received, i.e. Objective (vi). This 'logging' just consisted of making a stroke on a sheet of paper each time such a request was made e.g. ////.

By far the most interesting results of the whole study were those yielded by the interviews, especially that part which obtained comments from users regarding their understanding of the 6 sample entries. Certainly it is the latter which I believe will be of most interest to this audience and the remainder of this paper is primarily devoted to expanding on this part of the study.

Interviews with users

I had hoped that it would be possible to carry out a minimum of 300 interviews. The Centre did not have enough staff to conduct all of these itself and so some members of the British Library's staff volunteered to help us. In fact, because of the great pressure of work they were under these staff were unable to carry out as many interviews as we had hoped. The result was that only 225 interviews were undertaken. Of these, I carried out 108, my colleague Rosemarie Rawlings 79 and the remaining 38 were by the British Library staff's volunteers. Although this quantity of responses (or indeed even the proposed 300) were insufficient to produce high statistical accuracy for any particular figure, the study was carried out in such a way that I feel satisfied that the overall results can be trusted. In any case we were looking for a qualitative response as much as quantitative one.

Originally the interviews were intended to last 15 to 20 minutes, but the inclusion of the six sample catalogue entries led to most lasting 30 minutes and, a few, 35-40 minutes. One of the happy impressions which will remain with me from this study was the great willingness of users to cooperate with us. Of 240 persons approached only 15 refused. I had expected some instances of unpleasantness bearing in mind the wide range of people we would be approaching: authors, film producers, senior academics, researchers, publishers, students, eccentrics! After all, we were in one of the major research libraries in the world and many people had very limited time; many were from overseas and language might sometimes prove to be too great an obstacle to good communication. In fact there was not one unpleasant response during the whole study and of the 108 persons I interviewed at least 10 actually thanked me for the interview! As a result of going through the six sample entries they felt that they had learned useful information about the catalogues which would help them in the future. Personally I felt it was a great privilege to be able to conduct this study.

It was not possible to obtain a stratified sample, but a serious attempt was made to obtain a reasonable cross-section of users by not always approaching the same type of person in succession. If the interviewer had just interviewed a middle-aged man then the next person selected might be a young woman, or a person from an apparently different ethnic group. If a reader had searched, or was searching, for several serials titles then we asked for the details relating to one title only. During the twenty days of the study interviews were carried out during all the opening hours on Monday to Friday up to 5 p.m. and in addition some interviews were conducted in the evenings and on a Saturday.

The interview questionnaire consisted of 12 main questions one of which asked the person interviewed to give their opinion of the six sample catalogue entries and I will deal with this part of the study in greater detail in a minute. First I would like to give some results from the first part of the interview.

Some results

I was pleased to find evidence that the sample of readers we interviewed was a representative one. Figures of usage provided by the British Library had shown that it was calculated that overseas visitors accounted for 40% of total H & SS Reading Room usage. The results of the Centre's study showed that exactly the same proportion of our sample came from overseas. Of these, 44% came from North America, 44% from Europe and 12% from other countries e.g. Australia, India, Japan and so on. In fact, many of the readers whom we approached thinking that they came from overseas turned out to be of British nationality.

The following figures relate to the complete sample of 225. On the days they were interviewed:

71 (31.6%) had either used or were searching for details of a serial

89 (39.6%) had looked for details of a serial in a British Library catalogue within the last month. Of these, 35 persons had either used or were searching for a serial in the catalogue on the day they were interviewed. Therefore the total number of persons who had used a serial or searched a British Library catalogue within the last month was 125 (55.6%). Although all 225 users were asked for their understanding of the sample catalogue entries, only this sub-sample of 125 were interviewed further to find out the following:

(i) Did they have any problems when using the catalogues? 66 (57.4% of the sample) said they had. Many of these users had more than one and, of the problems identified, the multiplicity of sequences and the filing of entries caused most difficulty – especially the heading *Periodical Publications* followed by place in GK 3.

(ii) What were the actual details they had of the serial *before* they used the catalogue?

94 (81%) had the complete title
18 (15.5%) had title or subject words
4 (3.4%) had title abbreviations or initials
14 (12.1%) had the name of the issuing body
14 (12.1%) had the name of the publisher
14 (12.1%) had some other details such as date or volume number.

(iii) What was the main source of this information? As one might expect there were on surprises here.

7 (6.1%) had obtained their information from previous use of a catalogue in the British Library
6 (5.3%) had done so from previous use of a catalogue elsewhere
84 (73.7%) had the details from a bibliography or a reference
1 (0.9%) obtained the details from another library's staff
22 (19.3%) already had the details because of their existing knowledge Interestingly no one claimed to have details as a result of obtaining a them from a member of the British

Library's staff although this must often be the case.

(iv) Did users require the original version of the periodical or, if it could have been made available *immediately*, would a photocopy have satisfied their needs?

95 (76%) said that a photocopy would have satisfied them

18 (14.4%) said that they needed to see the original journal. The reasons were: bibliographic; ease of reading; quality of illustration; the binding; because of publication purposes; the need to see other articles, or the article was too long to photocopy

The last of the results which I will mention from the first part of the interview are those relating to the length of time all 225 persons interviewed had been using the facilities of the British Library's reading rooms. I divided the time into six periods and the results were as follows:

Less than 1 month	51 (22.7%)
Less than 1 year	20 (8.9%)
1-5 years	59 (26.2%)
6-10 years	33 (14.7%)
11-20 years	38 (16.9%)
More than 20 years	22 (9.8%)

(There were 2 missing cases)

When we analysed the responses from the 66 persons who claimed to have problems with searching the catalogue for serials by the periods of time they had been using the British Library's reading rooms, it was interesting to note that experience made no difference. If anything the results seem to indicate that the newer users had not yet had an opportunity to become fully aware of all the difficulties. For example, only 7 of those with less than a month's experience said that they experienced problems compared to 20 with one to five years experience and 24 with over eleven years experience. There was also no evidence that overseas users experienced more difficulties than those from the UK. These results, which demonstrated the common nature of problems for people of all levels of experience, were very much underlined by users' responses to the six sample catalogue entries. It is this part of the project that i will now describe.

British Library users' understanding of serials catalogue entries

The six sample catalogue entries as currently produced for serials are given as an appendix to this paper. Three with record numbers prefixed with an 'r' are from the 'General Catalogue, Current' and those with the prefix 'gk' are from the 'General Catalogue, pre-1971'.

Both these catalogues are provided on microfiche. The entries were selected as representative ones by senior members of the British Library staff and later checked in great detail by these staff against the actual serials held. Every entry had errors in them but from my experience I know that this is true of many libraries' catalogues. In any case I wanted 'real' entries to be looked at by users and not theoretically 'perfect' ones.

Each user was shown the sheet and asked if they would mind giving their opinion and understanding of any parts of entries, even punctuation. They were asked "Firstly, is there anything you do not understand or find clear about the entry, and, secondly, even if you do understand it do you think the information could be presented in a better way?"

It is true that, for the great majority of users questioned, only one or two of the entries were relevant to them in terms of the subject covered by the serial; however it was pointed out to them that usually entries for serials in their subjects would be produced in the same manner and therefore terms, abbreviations and punctuations would have exactly the same meaning. It is also true that many users would not usually take notice of many of the data elements because they did not use them and the fact that they did not understand them would not worry them. But this raises two questions:

(i) If other readers also do not use them, why do these data elements need to be included?

(ii) If the data elements are in fact needed, and could be useful to readers, should they not be provided in such a clear way that they can be understood at first sight and their value realised?

Many of the users either had not consulted serials, or at least only on very rare occasions, but we pointed out to them that they might need to do so at any time and that catalogue entries were provided to serve all needs, both current and potential.

Interviewers used a 'highlighting' pen to mark any part of the entry which caused problems and then if comments were made wrote these alongside the entry. We asked for comments on 6 different entries from 225 people and sometimes as many as four comments might be made about any one entry. This all had to be analysed manually so considerable work was involved. Analysis was by ISBD(S) 'areas'.

Users were asked to look at the first entry for 'ANNALS of Latin American Studies' in particular detail as it was short and many of the features were present in subsequent entries. Many people said that they found it perfectly clear at first reading; however, the interviewer would then ask for the user's understanding of particular words, phrases, abbreviations, etc. and the following demonstrates just some of the lack of understanding or confusion displayed. The most crucial difficulties were found in relation to Area 3 'Numbering area' and 'Holdings' and especially the use of hyphens for both ISBD punctuation and as 'open' signs indicating continuing runs of serials. For example – No. 1 – was sometimes read as if the hyphens were brackets and the data was in parenthesis. Therefore this was read by several users as '1 only'. Here are a few of the users' comments made in relation to Area 3 and 'Holdings' for 'ANNALS of Latin American Studies'.

Held from No. 1 to No. 4

No. bothers me. Expect vol. and no. only within a vol.

No. 1 – with 'holdings' confusing as to exact 'holdings'

Why record No. 1 – 1981 – if the British Library is not really holding No. 1 onwards

2 volumes in stock – Nos. 1 and 4 (*Note.* It is interesting that this user had 19 years experience of using the British Library H & SS Reading Room)

No. 1 in on Tokyo is how I would read it

Everything held from 1981 onwards, but something exceptional about 1984 'Holding from' might be clearer

– This clue really is very slight

Does – mean run finishes here?

'Holdings' puts me off, it is a financial word. Something simpler is needed

Assume this something I do not need to know about.

and many more!

There were 93 instances of some confusion over the word 'Holdings' and 94 cases of confusion over the '-' following 'no. 4' in the 'Holdings' statement. 53 people were confused by '-No.1-' in Area 3.

Area 5 'Physical description area' produced evidence of the problems experienced with abbreviation. In 'ANNALS of Latin American Studies' 'v' was taken to mean the following:

Vol. 5; 5 vols.; Vide; Various; 5 articles; v. in Italian means 'see also' (*Note.* This reader took v. to mean 'see also' Articles in English ...); Contains; No sense at all all by itself; Voir; Verso and so on!

There were 179 cases of confusion over v. which in AACR2 Rule 12.5B1 is the 'specific material designation' for printed serials.

My final examples are for the 'Notes area' and the use of jargon terms. In the case of 'ANNALS of Latin American Literature' the term 'Cover title' appears. The following are some of the interpretations of this:

I assume Cover title means "Article in English ..."

Might mean each year has a different title

Information on the cover could be the title in English, Spanish and Japanese

Cover title means change in title

Cover title means that the original title has been covered by rebinding

and so on

There were 120 cases of confusion relating to the term 'Cover title'. The number of cases here and for all the preceding relate *just* to 'ANNALS of Latin American Studies'.

I can assure you that the rest of the comments both for this serial and for the other five make fascinating reading and clearly show the need for producers of catalogues and cataloguing codes to be far more aware of the people who actually use what they provide.

Conclusions

This study was conducted specifically for the British Library and of course some of the findings relate just to that institution; nevertheless I believe the following conclusions have relevance to the wider library community.

(i) Accurate 'holdings' data are considered far mor important by users than 'bibliographic' details.

(ii) Ideally users would like to have correlation of volume numbers with dates in the 'Holdings' statement but many users recognised this was an almost impossible task because of the sheer magnitude of the problem.

(iii) Very few users want a journal as an artefact. Most would be well satisfied with a surrogate such as a photocopy or microfilm if this could be supplied immediately and with good enough quality.

(iv) There was little evidence that users of long experience are necessarily more knowledgeable about data in the catalogue entries than new users.

(v) Clarity of presentation and layout of the entries is far more important to users than additional data. Particular problems are

caused by:–

(a) Over abbreviation e.g. v. instead of vol.
ill. instead of illus.

(b) Ambiguous use of punctuation, especially the ISBN convention of using hyphens which get confused with hyphens used in dates.

(c) The use of jargon terms such as 'holdings', 'imprint', 'cover title', etc.

(d) Lack of 'labelling' of certain data elements (e.g. 'Publ. by').

(e) Lack of clarity of terms used, such as 'continued as' instead of 'split into', or the omission of words such as 'by' or 'at' in relation to publishers or places of publication.

(f) The considerable lack of understanding of the difference between the 'bibliographic' date and the 'holdings' date. It would appear that, in general, use of just the latter would be much less confusing to the user.

(g) Lack of 'paragraphing' of data, e.g. if a title changes, give each change a fresh line if possible, also the appropriate dates.

I hope that some of these conclusions may have an influence on certain aspects of serials cataloguing and cataloguing in general in the future.

REFERENCE

1. Seal, Alan, *et al.*
Full and short entry catalogues: library needs and uses. – Aldershot: Gower, 1982. ISBN 0-566-03484-0.

ACKNOWLEDGEMENTS

I would very much like to express my appreciation of all the support I received from my colleagues at the British Library, especially: Ross Bourne, Janet Koss and Janice Wrench. There were many others too numerous to list here but I am deeply grateful to all of them.

Although the Centre for Catalogue Research is funded by the British Library R & D Department the results given and opinions expressed in this paper are entirely my responsibility.

Appendix

```
ANNALS of Latin American studies. - No.1-. - [Tokyo] : Japan
   Association for Latin American Studies, 1981-.
     v.. - Articles in English, Spanish and Japanese. - Cover
   title.
     Holdings: no.4 (1984)-.
     r6710172                                    P.801/3471

[BULLETIN de statistique (Kigali)]
   Bulletin de statistique / Ministère du plan, République
   rwandaise. - No.1-. - Kigali : Direction générale de la
   statistique, [1962?]-.
   30cm. - Name of issuing body varies. - Quarterly. - From
   1974 issues an annual supplement. - Description based on :
   no.61 (Apr. 1979).
     Holdings: no.42 (Jul. 1974) ; no.61 (Apr. 1979)-.
     r6208656                                          S.V.890/4

JOURNAL
  Journal of Experimental Psychology ... - Vol.1, no.1 (Feb.
  1916) - Vol.102, no.6 (June 1974).
  Princeton, N.J. : Psychological Review Co., 1916-1974.
  102v. ; 26cm.
  Frequency varies. - Continued as: "Journal of Experimental
  Psychology. General" ; and, "Journal of Experimental
  Psychology. Memory, learning and cognition" ; and, "Journal
  of Experimental Psychology. Human perception and performance"
  ; and, "Journal of Experimental Psychology. Animal behavior
  processes". From vol.10, no.1 (Feb. 1927) - vol.23, no.1
  (July 1938) published for the American Psychological
  Association by the Psychological Review Co. From vol.23, no.2
  (Aug. 1938) onwards published by the American Psychological
  Association. - Imprint varies.
  Holdings: Vol.1-8 ; 10-55 ; 56, no.2-102, no.6
  gk92016855                                      PP.1247.ed

JOURNAL of Italian linguistics
   Italian Linguistics. - Vol.1 (1976), no.1-. - Lisse : Peter
   de Ridder, 1976-.
   ill ; 25cm. - Two issues per year. - From vol.3 also
   entitled: Journal of Italian Linguistics. - From vol.3
   published: Dordrecht : Foris Publications. - The issues for
   1976 and 1977 are also numbered 1-4.
     r6004506                                        P.983/102

OFFICIAL POST OFFICE DIRECTORY
   The official Post Office directory of Victoria (Bailliere's),
   containing the names, residences, and occupations of the
   inhabitants of the post towns of the Colony, inclusive of
   Melbourne and suburbs, arranged locally and alphabetically
   ... / compiled by authority. - 1868-1885.
   Melbourne : F.F. Baillière, 1868-1885.
   6v..
   Frequency varies. - Title varies. - Reference: Ferguson6529.
   Holdings: 1868-1870, 1875. - MICROFICHE. 33 microfiches;
   11x16cm
   gk92023347                                        Mic.F.241

PERIODICAL PUBLICATIONS. London
   [The Times]
   -Index to The Times. - Mar./Apr. 1957-Nov./Dec.1972.
   London : Times Publishing Company, [1957-1973].
   95v. ; 25cm.
   Continues: "The official index to the Times." - Continued
   as: "The Times index". - From 1972 published: "Reading :
   Newspaper Archive Developments".
   gk90049209                  2123.b-2124.b North Library Gallery
   - [Another copy]                                  PP.8004.za
   - [Another copy of the volumes from 1967 to 1972]       OPL
```